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13281 U.S. PTO

PTO/SB/05 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032
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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

Attorney Docket No. 29284/270

First Inventor Hisao Kikuchi

Title Network System and Communication Band Control Method Thereof

Express Mail Label No.

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

- Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
- Applicant claims small entity status.
See 37 CFR 1.27.
- Specification [Total Pages 34]
(preferred arrangement set forth below)
 - Descriptive title of the Invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
- Drawing(s) (35 U.S.C.113) [Total Sheets 7]
- Oath or Declaration [Total Sheets 4]
 - a. Newly executed (original or copy)
 - b. Copy from a prior application (37 CFR 1.63 (d))
(for a continuation/divisional with Box 18 completed)
 - i. **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
- Application Data Sheet. See 37 CFR 1.76

ADDRESS TO:
 Mail Stop Patent Application
 Commissioner for Patents
 P.O. Box 1450
 Alexandria VA 22313-1450

7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
 - a. Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. CD-ROM or CD-R (2 copies); or
 - ii. Paper
 - c. Statements verifying identity of above copies

ACCOMPANYING APPLICATIONS PARTS

9. Assignment Papers (cover sheet & document(s))
10. 37 C.F.R. 3.73(b) Statement Power of (when there is an assignee) Attorney
11. English Translation Document (if applicable)
12. Information Disclosure Statement (IDS)/PTO-1449 Copies of IDS Citations
13. Preliminary Amendment
14. Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15. Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. Other: Letter To Examiner

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

Continuation Divisional Continuation-in-part (CIP)

of prior application No: 09 / 794,171

Prior application information: Examiner Tri H. Phan

Art Unit: 2661

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

Customer Number

23838

OR Correspondence address below

Name			
Address			
City	State	Zip Code	
Country	Telephone		Fax

Name (Print/Type)	John C. Altmiller	Registration No. (Attorney/Agent)	25,951
Signature			Date
		March 24, 2004	

This collection of information is required by 37 CFR 1.53(d). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 770)

Complete if Known

Application Number	Unassigned
Filing Date	Herewith
First Named Inventor	Hisao Kikuchi
Examiner Name	Unassigned
Art Unit	Unassigned
Attorney Docket No.	29284/270

METHOD OF PAYMENT (check all that apply)

 Check Credit card Money Other None
Order
 Deposit Account:

Deposit Account Number	11-0600
Deposit Account Name	Kenyon & Kenyon

The Director is authorized to: (check all that apply)

 Charge fee(s) indicated below Credit any overpayments
 Charge any additional fee(s) during the pendency of this application
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	770
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1)

(\$ 770)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims	Fee from below	Fee Paid
Total Claims	9	-20 **	= 0
Independent Claims	3	-3 **	= 0
Multiple Dependent			X = 0

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$ 0)

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code (\$)	Fee (\$)
1051	130	2051	65
1052	50	2052	25
1053	130	1053	130
1812	2,520	1812	2,520
1804	920*	1804	920*
1805	1,840*	1805	1,840*
1251	110	2251	55
1252	420	2252	210
1253	950	2253	475
1254	1,480	2254	740
1255	2,010	2255	1,005
1401	330	2401	165
1402	330	2402	165
1403	290	2403	145
1451	1,510	1451	1,510
1452	110	2452	55
1453	1,330	2453	665
1501	1,330	2501	665
1502	480	2502	240
1503	640	2503	320
1460	130	1460	130
1807	50	1807	50
1806	180	1806	180
8021	40	8021	40
1809	770	2809	385
1810	770	2810	385
1801	770	2801	385
1802	900	1802	900

Other fee (specify)

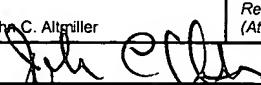
*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$ 0)

*or number previously paid, if greater; For Reissues, see above

SUBMITTED BY

Name (Print/Type)	John C. Altmaier	Registration No. (Attorney/Agent)	25,951	Telephone	202.220.4200
Signature				Date	March 24, 2004

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PATENT
Docket No.: 29284/270

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Hisao Kikuchi

SERIAL NO.: Unassigned (Continuation of U.S. Serial No. 09/794,171, filed February 27, 2001)

FILED : Herewith

FOR : NETWORK SYSTEM AND COMMUNICATION BAND CONTROL
METHOD THEREOF

ART UNIT : Unassigned

EXAMINER : Unassigned

COMMISSIONER FOR PATENTS
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ALEXANDRIA, VA 22313-1450

LETTER

SIR:

Prior to examining this application, the Examiner is respectfully requested to consider the remarks below.

REMARKS

Claims 1-9 are in this application. Claims 1, 6, 7 and 8 in this application correspond to claims 1, 5, 9 and 13 of the parent of this application. Claim 9 is similar to claim 1 but has been written to define structure, rather than means plus function elements.

In the Office Action of December 24, 2003 in the parent, Serial No. 09/794,171, claims 1 and 5 were objected to because of an uncleanness in regard to whether one or more node was involved in certain cases. Each node delivers its own band information to the other nodes in the network and receives the band information from the other nodes in order to update contents of the band information storing means (band information managing table). The band traffic calculating means controls the band traffic of the data communication of the node to which it belongs. This has now been made clear in the claims. Claims 1 and 5 were also rejected under 35 U.S.C. § 112 for similar reasons and for lack of antecedent basis for a number of terms. The claims presented in this application also overcome that rejection.

Claims 1, 5, 9, and 13 were rejected as unpatentable over Kanamaru et al. in view of Chen et al. Applicants believe that such a rejection is improper for the reasons set out in detail below.

Kanamaru (US6,574,197) shows the method of monitoring a network. Each node sends a monitoring packet to the adjacent node and receives a response packet from the adjacent node for detecting the node break away (the status condition). And, the node which detected the adjacent node break away, broadcasts a notification packet to all other nodes to notify them of the node break away (Claim 1).

The application and the claims presented are directed to a method of band control. Each node broadcasts its own band information and receives the band information of other nodes from the other nodes (Figs. 7 and 8). When each node sends the communication data, the node calculates and determines the band traffic for the data according to the band information of that node and the other nodes (Fig. 6).

The status condition of Kanamaru relates to each node and indicates whether the node is alive or dead, while the communication attribute (band information) of the present invention

relates to each communication and includes IP address, port number, band traffic, type etc. Both exchange information's between the nodes but the contents of the information are different.

Chen (US6,487,170) also shows the method of controlling packet flow. Chen is applied to a DiffServ Packet Network. The present invention specification explains "DiffServ" from page 4, line 13 to page 5, line 19. In the DiffServ Packet Network, Chen shows evaluating whether a new premium service which requests the use of a predetermined bandwidth amount can be accepted or rejected (admission control). Such acceptance or rejection is made by bandwidth measurements of output links and input links of the node as described on column 7, lines 6 to 27. Such acceptance or rejection does not depend on the bandwidth utilization in other nodes. Chen shows the Bandwidth Reservation Processing in the DiffServ framework. Figs. 4-6 shows reserving the bandwidth of all nodes on the communication path. It is for reserving the bandwidth for the premium services.

In the presently claimed invention, the node calculates and assigns the bandwidth traffic for the communication data using the bandwidth information of the node and the other nodes. The bandwidth assignment calculation is different from the decision of "accept" or "reject" compared with a predetermined threshold value.

Chen is directed to accomplishing QoS communications in DiffServ Packet Network, while the present invention is for performing bandwidth control in a network handling both QoS communications and Best Effort (BE) communications.

Accordingly, the present invention is different from the cited references in that the band information is collected from all nodes and that bandwidth to be assigned is calculated using the all collected node band information.

In view of the above, Applicants believe that all claims remaining in this application are in condition for allowance, prompt notice of which is respectfully solicited.

The Examiner is invited to call the undersigned at (202) 220-4200 to discuss any information concerning this application.

The Office is hereby authorized to charge any additional fees under 37 C.F.R. § 1.16 or § 1.17 or credit any overpayment to Deposit Account No. 11-0600.

Respectfully submitted,


John C. Altmiller
Registration No. 25,951

Date: March 24, 2004

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